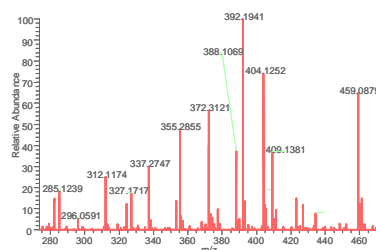
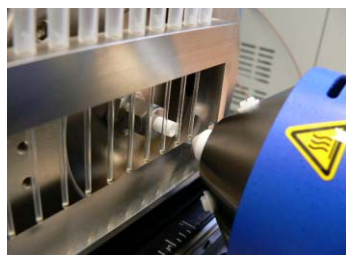


Final Programme

Application of ambient mass spectrometry for the analysis of food contaminants/residues and metabolomic fingerprinting: Seminar and training

April 26–27, 2010



Organised by **Department of Food Chemistry and Analysis of The Institute of Chemical Technology, Prague, Czech Republic**

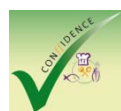
Cooperating institutions: **The Food and Environment Research Agency, Sand Hutton, UK and RIKILT – Institute of Food Safety, Wageningen, The Netherlands**

Supporting institution: **KR Analytical Ltd, Sandbach, UK**

This training is supported by the European Commission funded Integrated Projects:



FOOD-CT-2004-06988 “BIOCOP (New Technologies to Screen Multiple Chemical Contaminants in Foods)” coordinated by Queen’s University (Belfast, UK)



FP7-211326-CP “CONffIDENCE (Contaminants in Food and Feed: Inexpensive Detection for Control of Exposure)” coordinated by RIKILT – Institute of Food Safety (Wageningen, The Netherlands)

Application of ambient mass spectrometry for the analysis of food contaminants/residues and metabolomic fingerprinting: Seminar and training

Final Programme

April 26 (Monday)

- 09:00 Registration of the participants
Building A, Technicka 5 (participants will be met in the foyer)
- 09:30 Welcome
- 09:35 Lectures (Building A, Technicka 5, 4th floor, room 402)**
Prof. Dr. Jana Hajslova: Ambient mass spectrometry in food analysis, Institute of Chemical Technology, Prague, Czech Republic
Dr. Brian Musselman: Operation of DART source – how it works and latest developments, IonSense, Inc., Saugus, MA, USA
Richard Fussell: The application of Ambient Solids Analysis Probe (ASAP) – TOF-MS for the rapid analysis of food contaminants/residues, The Food and Environment Research Agency, Sand Hutton, UK
Dr. Hans Mol: DESI-MS in food contaminants control, RIKILT – Institute of Food Safety, Wageningen, The Netherlands
- 12:00 Lunch
- Practical sessions & Satellite workshops
(Building B, Technicka 3, 1st floor, rooms 152/157/159)**
- 13:00 Practical session I: DART-TOFMS and DART-Orbitrap-MS** (1/2 of participants)
Introduction to the instrumental software, data evaluation, high throughput analysis of pesticide residues and mycotoxins
- Satellite workshop I: IonSense** (1/2 of participants)
Dr. Brian Musselman: The Art of DART
- 14:30 Satellite workshop: IonSense** (1/2 of participants)
Dr. Brian Musselman: The Art of DART
- Practical session I: DART-TOFMS and DART-Orbitrap-MS** (1/2 of participants)
Introduction to the instrumental software, data evaluation, high throughput analysis of pesticide residues and mycotoxins
- 16:00 Discussion
- 16:30 End of the 1st day of the training
- 19:00 Social dinner — Restaurant KOLKOVNA**

April 27 (Tuesday)

Practical sessions & Satellite workshops

(Building B, Technicka 3, 1st floor, rooms 152/157/159)

10:00	Practical session II: ASAP–Q/TOFMS (1/2 of participants) <i>Introduction to the instrumental software, data evaluation, high throughput analysis of pesticide residues and mycotoxins</i>	Satellite workshop II: Thermo (1/2 of participants) <i>Dr. Michal Godula: Application of ultra-high resolution mass spectrometry in food analysis</i>
11:00	Satellite workshop II: Thermo (1/2 of participants) <i>Dr. Michal Godula: Application of ultra-high resolution mass spectrometry in food analysis</i>	Practical session II: ASAP–Q/TOFMS (1/2 of participants) <i>Introduction to the instrumental software, data evaluation, high throughput analysis of pesticide residues and mycotoxins</i>
12:00	Lunch	
14:00	Practical session III: Food authenticity and profiling (1/2 of participants) <i>Application of DART–TOFMS and DART–Orbitrap-MS as fingerprinting techniques for food authenticity and profiling</i>	Satellite workshop III: Waters (1/2 of participants) <i>Jean-Marc Joumier: ASAP - Use of ambient sampling technique in food safety</i> <i>Dr. Sandra Rontree: Rapid fingerprinting of chemical composition in food produce and food profiling for product development, adulteration, tracing, origin</i>
15:00	Satellite workshop III: Waters (1/2 of participants) <i>Jean-Marc Joumier: ASAP - Use of ambient sampling technique in food safety</i> <i>Dr. Sandra Rontree: Rapid fingerprinting of chemical composition in food produce and food profiling for product development, adulteration, tracing, origin</i>	Practical session III: Food authenticity and profiling (1/2 of participants) <i>Application of DART–TOFMS and DART–Orbitrap-MS as fingerprinting techniques for food authenticity and profiling</i>
16:00	Discussion, summary of the outcomes, performance characteristics of ambient mass spectrometry methods in residue analysis	
16:30	End of the 2 nd day of the training	

Application of ambient mass spectrometry for the analysis of food contaminants/residues and metabolomic fingerprinting: Seminar and training

AIM

This training course will provide participants with knowledge in the application of ambient mass spectrometry for the rapid analysis of food contaminants (e.g. pesticide residues, mycotoxins) and metabolomic fingerprinting. The benefits and limitations of a number of different ambient mass spectrometry techniques will be discussed, including Direct Analysis in Real Time (DART) and the Atmospheric Solids Analysis Probe (ASAP).

DESCRIPTION

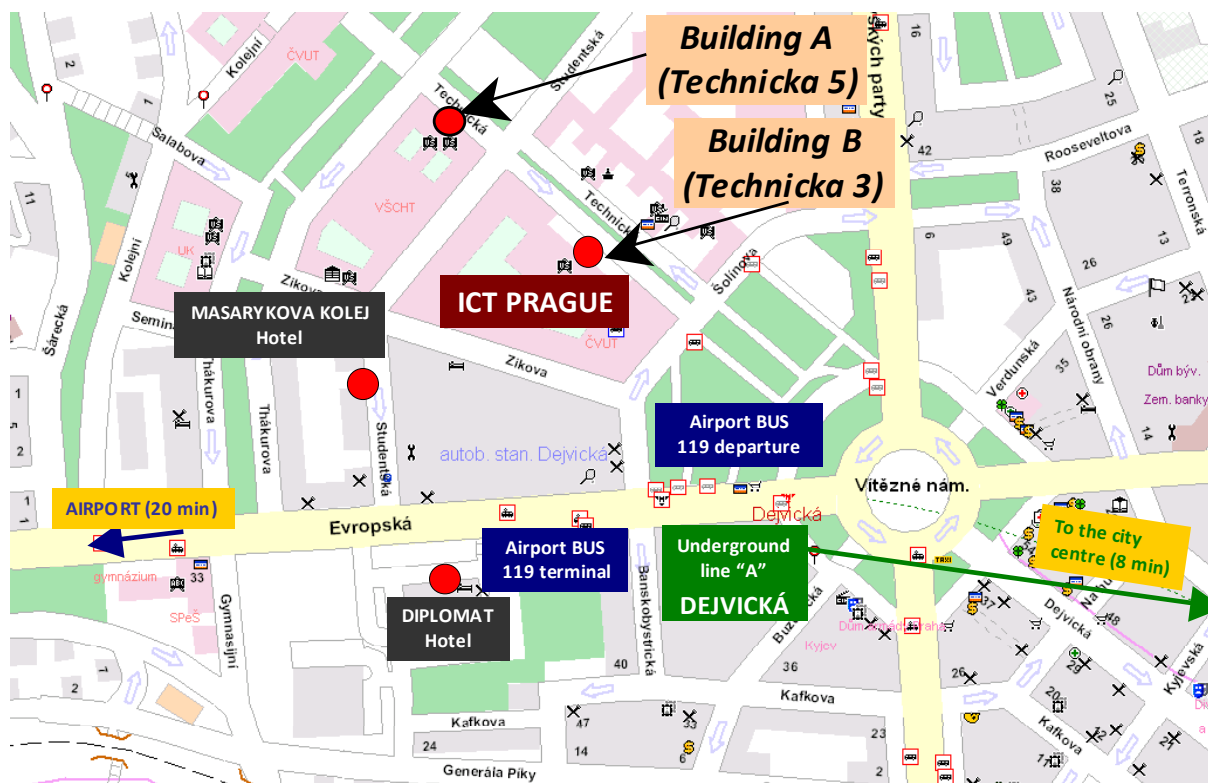
The training will focus on the theory and practical application of

- DART coupled to a high-resolution mass spectrometer (time-of-flight, TOFMS or orbitrap-MS), and
- Atmospheric Solids Analysis Probe (ASAP) coupled to a quadrupole/TOFMS.

DART and ASAP are representatives of new types of ion source working under ambient conditions. As ambient mass spectrometry techniques often require no or minimal sample preparation the overall analysis times can be reduced to a few minutes. Furthermore, use of the high-resolution MS for accurate mass measurement provides information of elemental composition and hence the identification of target analytes and possible identification of “unknown” contaminants.

VENUE

Training course will be organised at the Department of Food Chemistry and Analysis of the Institute of Chemical Technology, **Technická 3 & 5 street**, Prague 6, Czech Republic, <http://www.vscht.cz>.



SOCIAL DINNER

The participants are invited to attend the social dinner on the first day of the workshop. The address of the restaurant: Restaurant **KOLKOVNA - Celnice**, V Celnici 4 street, Prague 1.

For details, see <http://www.kolkovna.cz/index.php?language=en&place=13&show=hot>



GENERAL INFORMATION

Entry into the Czech Republic

Czech Republic is a member of the European Union. The participants from particular countries are required to have valid visa. Please take your passport as a personal identification document even when being an EU citizen.

Insurance

The participants are advised to arrange whatever insurance they consider necessary. The organisers cannot accept any liability for loss or damage of properties, injuries, unexpected events, non-appearance of specific speakers, program changes.

Currency

The Czech currency is Czech Crown (CZK, local abbrev. Kč), one CZK divides into 100 Hellers. Czech Crown is fully convertible to EUR, USD, CHF, JPY and many other firm currencies. In hotels, major restaurants and shops, credit cards (e.g. Visa, MasterCard, AmEx etc.) or EUR are accepted as indicated at the entrances. The Czech currency can be obtained from ATP using your credit or debit cards as well as in many exchange offices in the town, at the airport or in banks elsewhere.

Climate

Prague is located in the Central Europe and both Atlantic and continental circulation influence the weather. In April, based on current weather forecast daytime temperatures should be 7–13°C.

Please follow the weather forecast for central Europe before leaving for Prague (*e.g.* at www.weather.com).

Important local telephone numbers

Emergency 112, Police 158, Ambulance 155, Firemen 150.
The Czech Republic telephone country code is +420.

Electricity

Czech Republic uses 230 Volt.

Prague Public Transport

The Prague City displays one of the best public-transport systems in Europe, which includes Metro, tram, bus and some railway lines. For public transport in Prague, see <http://www.dpp.cz>.

Public transport tickets valid for Metro (subway), bus, and tram must be purchased before boarding and immediately validated on the first use of a transport medium by one of the ticket cancellation machines placed inside the vehicle or at the subway entrance. On all stations, the time table as well as a list of line stations can be found.

The tickets are available at most of the newspaper (cigarette, tobacco) stands, in small shops, and from special vending machines. You can buy two types of tickets for a single trip:

- 26 CZK (about 1 €) fare for a 75 minute trip with as many transfers as needed.
- 18 CZK (about 0.70 €) fare for a trip limited to five subway stops, max. 30 minutes or to 20 minutes transport time in tram or bus. With this ticket, transfers are permitted only in metro.
- There are also special tickets valid for 24 hours (100 CZK), three days (330 CZK), 7 days (500 CZK).